

5 Dualism-based design of the Introductory Chinese MOOC ‘Kit de contact en langue chinoise’

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Abstract

This article reviews the existing Chinese language Massive Open Online Courses (MOOCs) and points out three problems in their design: the monism-based teaching method, the non-integration of cultural elements, and the lack of learner-learner interactions. It then presents the design principles of the Introductory Chinese MOOC in an attempt to tackle these problems.

Keywords: teaching Chinese as a foreign language, MOOC, French-speaking Chinese learner, character-based teaching method.

1. Introduction

In 2013, the National Institute of Oriental Languages and Civilizations (INALCO, France) launched the project *Les MOOC de l'INALCO* using the French MOOC platform *France Université Numérique* (FUN). Chinese was one of the nine languages involved in this project, and the course was scheduled to start in November 2016. The authors of this paper are the authors of the Introductory Chinese MOOC.

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Chinese is a non-alphabetic language with many unique features. It is a tonal and non-inflectional language (verbs, nouns, articles, etc.) with a logographic writing system. The written language does not have direct correspondence with the sounds. Pinyin, the Romanization system of Chinese characters, helps to pronounce the characters and thus is helpful for aural and oral communication. However, just knowing Pinyin is not enough to understand Chinese. Besides, a word in Chinese can be a single character, two characters, or three characters, etc. So in what way could a Chinese MOOC teach those features to benefit the learners? In this article, we will first analyse some existing Chinese language MOOCs and then present how our MOOC attempted to address their shortcomings.

2. Review of some Chinese language MOOCs

Before and during the design of our MOOC, we reviewed the following Chinese language MOOCs in terms of the target learners, pedagogical approach to teaching characters, integration of cultural elements, and learner-learner interaction:

- *Chinese for beginners* of Beijing University (Coursera) <https://www.coursera.org/learn/learn-chinese>;
- *Mandarin Chinese: Start talking with 1.3 billion people* of Tsinghua University (edX) <https://www.edx.org/course/tsinghua-chinese-start-talking-1-3-tsinghuax-tm01x>;
- *Chinese Language: Learn Basic Mandarin* of Taiwan National Chengchi University (edX) <https://www.edx.org/course/basic-mandarin-chinese-level-1-mandarinx-mx101x-0>;
- *Intermediate Chinese Grammar* of Beijing University (edX) <https://www.edx.org/course/zhong-ji-yi-yu-ju-fa-intermediate-pekingx-20000001x-0>;

- *Chinese for HSK* series of Beijing University (Coursera) <https://www.coursera.org/learn/hsk-1>;
- *Chinese Characters for Beginners* of Peking University (Coursera) <https://www.coursera.org/learn/hanzi>.

2.1. Target learners

Most MOOCs that teach Chinese language are designed for English speakers as their target learners, including the ones listed above. The Introductory Chinese MOOC *Kit de contact en langue chinoise* is the first Chinese MOOC for French-speaking learners.

2.2. Pedagogical approach

These MOOCs vary greatly in their pedagogical approaches. The *Chinese for beginners* of Beijing University (Coursera), a typical xMOOC, focuses on knowledge transfer. This introductory course uses a traditional transmissive teaching approach with only one tutor giving lectures about Chinese language, without even one dialogue. The whole course was delivered in English with slides in Pinyin instead of Chinese characters.

The *Mandarin Chinese: Start talking with 1.3 billion people* of Tsinghua University (edX) and the *Chinese Language: Learn Basic Mandarin* of Taiwan National Chengchi University (edX) could be regarded as communication-based MOOCs.

The former focuses on daily basic language skills for everyday life in Mandarin speaking countries, particularly for foreign students in China. The dialogues are taught mostly in Pinyin, with very few frequently used characters. The latter aims to train the learners to be *competent* Chinese speakers as tourists to Taiwan. The vocabulary learning focuses on the usage of the words. Character teaching is not a priority in either course. Both MOOCs have interesting dialogues with different scenarios to help develop learners' communicative skills.

The other three MOOCs in the list teach specific skills of the Chinese language. The *Intermediate Chinese Grammar* of Beijing University (edX) focuses on the intensive learning of Chinese grammar. The *Chinese for HSK* series of Beijing University (Coursera) is for the HSK test preparation, which to some extent could be viewed as an online resource, and the *Chinese Characters for Beginners* of Peking University (Coursera) focuses on character teaching, but with no supporting words or dialogues to help memorize the taught characters.

3. Learner-learner interaction and integration of culture

There are limited learner-learner interactions in the discussion forums for all of the above MOOCs. The communications are not interactive as learners only post their views without interacting with other learners. They do it either to finish that task so they can proceed to the next step or simply to establish their online presence.

Regarding the integration of the Chinese culture with language teaching, we feel that few cultural elements are integrated in the teaching of dialogues, language activities and forum discussions.

In summary, we can see that the teacher-centered and knowledge-based approaches are still dominant in the field. In our opinion, these MOOCs fail to address the following three fundamental questions in their design:

- What is the basic teaching unit, character or word, especially for beginners? And how is this basic unit presented in the design of a MOOC in Chinese?
- How to design activities that promote learner-learner interactions?
- How to promote intercultural learning in a Chinese language MOOC?

4. Literature review

4.1. Monism vs dualism

Since Teaching Chinese as a Foreign Language (TCFL) became an academic discipline in the 1980's (Lü, 1987), educators and researchers have been debating over the basic unit of teaching Chinese language. During the 1980's and 90's, the debate was mainly between the word-based teaching method (词本位) and character-based or Zi-based teaching method (字本位).

The word-based method can be traced back to Ma (1898) who wrote the first Chinese grammar book, advocating words as the basic units of language teaching. Under the influence of this approach, most existing Chinese language teaching materials have been designed to teach the word first, then use the words to make sentences, and finally the composition of the text, which is similar to the methods used in the teaching of English, French, and other phonetic languages.

The character-based teaching method (Lu, 2011; Pan, 2002; Ren, 2002; Wang, 2000; Wang, 2009; Xu, 1997, 2005) regarded Chinese characters as the basic unit of teaching, but at the same time acknowledging the strong connection between characters and words (Bellassen, 2016). It argued that teaching should respect the unique characteristics of Chinese languages (as mentioned before). It emphasized the character-based theory in Chinese Language Studies in that characters are the basic building blocks of Chinese syntax, just as words are that of Indo-European languages (Shen, 2016).

During recent years, the terms *character-based* and *word-based* have caused some misunderstanding and confusion. The two terms, originally used to distinguish two main teaching methods, were put in sharp opposition to each other by some Chinese linguists. As such, Bellassen (2016) recently proposed the concepts of *dualism* (二元论) and *monism* (一元论). For him, the *monism-based method* regards words as the basic teaching units and that the character teaching should follow the teaching of words. However, the *dualism-based method* admits the existence of two basic units of Chinese teaching: character

and word. The character teaching should guide the word teaching so as to make learning efficient, especially for beginners. What is more, the *dualism-based method* emphasizes the development of the visual identification of graphics and thus improves the memorization of characters.

The MOOCs reviewed above were designed with *monism-based methods*, hence the memorization of characters was neglected.

4.2. Positioning of cultural elements

It is widely accepted that language and culture are inseparable in language teaching. We think that the cultural elements should not be a simple knowledge transfer. The integration of cultural elements would enforce and enrich language learning and play a very important role in motivating learner participation and stimulating critical thinking (Álvarez & Kan, 2012). The question is, how can we embed it in the MOOC design to encourage critical thinking and intercultural learning.

4.3. Learner-learner interaction

Interaction is a central focus in language learning, especially for an online massive language course. The timely feedback from teachers and peer students plays a very important role in a MOOC for language learning (Lin & Zhang, 2014). As we have mentioned beforehand, most of the interactions observed in the above mentioned MOOCs were not interactive. The role of interactions should go beyond the level of providing correct answers by creating collaborative problem-solving experiences that “empower learners in networked environments for fostering critical thinking and collaboration, developing competence based outcomes, encouraging peer assistance and assessment through social appraisal, providing strategies and tools for self-regulation, and finally using a variety of media and ICTs to create and publish learning resources and outputs” (Guàrdia, Maina, & Sangrà, 2013, p. 1).

In the next section, we will present how we applied the above three principles in the design of our MOOC.

5. Design of the Introductory Chinese MOOC

5.1. Course structure and objective

The Introductory Chinese MOOC, a seven week MOOC, is designed to teach beginners' Chinese to French-speaking learners who have no or little knowledge of Chinese language and culture. It aims to help learners develop personalized strategies to learn a 'distant language' such as Chinese, and finally to facilitate their discovery of the Chinese culture (<https://www.fun-mooc.fr/courses/Inalco/52004/session1/about>).

Except for the introductory week, each of the following weeks centers around character teaching accompanied by a variety of simple topic-based tasks. Each week ends with a culture session where one or two cultural elements are introduced and open ended questions are asked.

The learning outcomes are comparable to A1 of the Common European Framework of Reference for languages (CEFR). At the end of the course, learners were required to master 100 high frequency characters³.

5.2. Dualism-based teaching method

The design of the MOOC is guided by a dualism-based teaching method (Bellassen & Zhang, 1989), with careful consideration taken with the unique characteristics of the Chinese language and the French-speaking learners' specific difficulties, i.e. to establish the link between the character, its romanized Pinyin, and the tone (Figure 1).

The design focus of the learning activities was to establish the *character-meaning-sound* link that did not exist in French. From the perspective of the dualism-based method, this dimension could be emphasized with the use of

3. The 100 high frequency characters were chosen on the basis of the Table of 400 characters, an index to characters, in Bellassen and Zhang's (1989) book.

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technology to increase the learners' exposure to the characters and words and thus help to memorize them (Figure 2).

Figure 1. Lecture videos of the Introductory Chinese MOOC

S1 Traits > Composants

Clé et composant

- Du point de vue du classement des caractères, l'unité de base est la **clé** ou **élément sémantique**
 - ~200 clés
 - 明 *clair* a pour clé 日 *soleil**
- Du point de vue de la mémorisation, l'unité de base est le **composant graphique**
 - ~500 composants
 - 明 pour composants 日 et 月

S1 Phonétique > Initiales

comme en français :

- n, f, m, l, s

... ou presque :

- b, d, g

明 = 日 + 月

Explanation

- le chinois possède un **nombre limité de syllabes** différentes.
- **le contexte et le ton** permettent de préciser de quel **caractère** il s'agit ! Ainsi...

mā mǎ mā mǎ mā

maman chanvre cheval insulter question

Figure 2. The design of character-meaning-sound learning activities

Exercices

1. Écoutez et choisissez la phrase qui signifie "La Chine est grande".

Listen and choose the correct audio to the meaning "China is big".

MEANING

SOUND PINYIN

CHARACTER

Exercices

1. Quel pinyin correspond le mot 中国 ?

Choose the correct pinyin to the word 中国.

Exercices

Écoutez attentivement et écrivez le pinyin. Utilisez le clavier si nécessaire. Indiquez aussi à la fin le ton de l'expression : dans la phrase "Le train de Hong Kong démarre à 8h30", le ton de "train" est le ton 2 et le ton de "Hong Kong" est le ton 4. Par exemple, le pinyin de 8点三十分 est 八点三十分.

Listen and write down the number of the tons of each word.

Due to limited tools on the FUN platform, different types of learning activities were introduced to the MOOC:

- aural reception (distinguish phonetics);
- aural comprehension (understand the content of a dialogue or a text);
- oral practice (repeat with an audio);
- visual practice (distinguish characters);
- hand-writing practice (write characters on paper with teacher presentation);
- reading comprehension (understand a text);
- writing (type in Chinese with a computer).

These activities were categorized as *assessable* and *non-assessable*. The quizzes created within the platform FUN were *assessable* activities, usually after lecture videos. The interactive learning games created with the external tools could not be evaluated by the platform FUN for technical reasons. These games, together with phonetic practice and character handwriting practice, were introduced as *non-assessable* activities. However, there was a strong link between them ([Figure 3](#)) so that the learners were obliged to do all these activities to reach a passing score.

5.3. Learner-learner interaction

As mentioned earlier, the fostering of learner autonomy and critical thinking were considered as vital in the success of a language MOOC. A forum, as a very important online interaction tool, was introduced with different purposes in the design of the Introductory Chinese MOOC.

There were 49 forums created in the present MOOC, falling into two main types: experience sharing and critical thinking development. The experience sharing forums were created after some *non-assessable* games or exercises, aiming not only to encourage peer assistance, to share learning strategies and experiences, thus to foster collaboration, but also to develop reflective learning processes (Figure 4).

Figure 3. The link between assessable and non-assessable exercises

The screenshot shows a discussion forum interface. At the top left, there is a section titled "Assessable exercises" containing a list of Chinese characters and their meanings. Below this, there are two smaller sections: one titled "Reliez les composants aux sinoogrammes." (Match components to characters) and another titled "Trouvez la clé de chaque sinoogramme." (Find the key of each character). A blue arrow points from the "Assessable exercises" section down towards the bottom right of the screen. On the right side, there is a large image of a Chinese character recognition game board with various characters and numbers. Another blue arrow points from the "Assessable exercises" section towards the bottom right of the board.

Figure 4. Discussion forum for non-assessable exercises

The screenshot shows a discussion forum interface for non-assessable exercises. In the center, there is a box labeled "Discussion forum for non-assessable exercises". To the left, there is a section titled "Counting numbers on your fingers, is it cultural?" with a sub-section "Compter avec les doigts, très culturel ?". To the right, there is a section titled "Do you find the two exercises useful? Have you used other strategies to learn Chinese characters?" with a sub-section "Pour approfondir votre apprentissage, essayez de relier les sons aux sinoogrammes. C'est à vous !". Arrows point from the "Discussion forum for non-assessable exercises" box to both of these sections. Below these sections, there are two more boxes: "Pour approfondir votre apprentissage, essayez de relier les sons aux sinoogrammes. C'est à vous !" and "Est-ce que ces deux exercices vous ont semblé utiles ? Pourquoi ? Avez-vous mis en place d'autres stratégies pour apprendre les caractères chinois ?".

5.4. Embedding culture to develop critical thinking

Each week, the learning ended with a culture session. The cultural elements were very carefully selected to make sure that they were relevant to the language content of that week. It aimed to both expand cultural knowledge and develop critical thinking, thus promoting learner motivation. Take the cultural session of Week 2 as an example; after watching the video about the population of China, the learners were encouraged to exchange their views in a discussion about ‘the great inner migration during the Chinese New Year period’ (Figure 5).

Figure 5. Discussion forum in Week 2 for the culture session

The figure shows a screenshot of a Moodle-based discussion forum. At the top left, there is a sidebar titled "Semaine 2 你是最中国人?" listing various course modules with their last update dates. The main area features a video player showing a video titled "Les Chinois, de l'Expo universelle de Shanghai aux migrants". Below the video, there is a call-to-action button: "Please exchange with each other what you know and what you think about the massive internal migration during the Spring Festival in China." An arrow points from this text box to a post in the discussion forum below. The discussion forum has a red header box labeled "Discussion forum for cultural session". One visible post in the forum is titled "Traditions et Modernité" and discusses the Chinese New Year migration. The post includes a link to a document titled "Migration en Chine" and a message box for replies.

There were more than 670 posts in the forum. The discussion, entitled ‘Tradition and Modernity’, attracted 30 responses. The student who posted the first message commented on the common phenomenon that instead of following the tradition of going home to spend the Chinese New Year with their parents, more and more young people invite their parents to come to the cities where they work to spend the festival, but the tradition of giving ‘red envelopes’ (new year money) to children is kept. In the responses, some students thanked the first poster for sharing this information; “Merci

pour toutes ces informations passionnantes”. Some compared it to what they had experienced in China and other countries, for example, in Japan, ‘red envelopes’ are given to even 20 year old young people; “Au Japon également il y a cette tradition de donner une enveloppe avec de l’argent (お年玉) mais ceci jusqu’à la majorité ! (20 ans)”. A lot of students expressed their appreciation in the discussion thread that sharing various views helped them deepen their understanding of Chinese language and culture; “j’apprends petit à petit à la connaître au travers des vidéos des cours, mais aussi grâce aux informations et expériences que partagent les participants du forum”.

6. Evaluation and conclusion

At the end of the course, the participants were invited to take a post-course questionnaire. 296 completed responses were obtained, about 10% of the active learners (2,827 of 9,805 registered learners). It can not be regarded as representative for all active learners, but may give us some indications to improve the MOOC (see Table 1).

The general feedback from the learners was positive. Most of them (96%) claimed that the MOOC met their personal expectations and the course content and organization were satisfactory (95%). On average, about 90% of learners participated in more than 3/4 of the MOOC, and 93% of them obtained the certificate. However, technical problems, lack of time, and workplace commitments were considered as the main barriers in completing the MOOC.

Table 1. Key results from post-course questionnaires

Question	Answer
I am satisfied with the MOOC	97%
I have attained my learning objectives	96%
I am satisfied with the content of the MOOC	95%
On average, I spent ____ hours per week following the MOOC 1-3h	28%
3-5	39%
5-8	23%

I have met these difficulties in following the MOOC technical problems (Internet, software, MOOC platform) lack of time work obligations	41% 31% 26%
I participated in at least ¾ of the following activities (>3/4) watching videos doing exercises playing games practising handwriting reading forum posts Participating in forum discussions	90% 96% 96% 95% 78% 45% 25%
I think the following interaction(s) was(were) of help for my learning with tutors with other learners with all kinds of learning activities	48% 48% 89%
I think the interaction with other learners helped me to enrich my knowledge understand well the content of the MOOC guide my learning	63% 27% 25%
I obtained the certificate for the purpose of personal satisfaction including it in my CV looking for a job	54% 34% 4%

We were especially pleased by learners' dynamic participation in learner-learner interactions. In the 49 forums created in this MOOC, there were 4,305 discussion threads, without counting the number of posts in one thread of discussion. To be particularly noted, the total posts in the seven week culture section forums reached 3,386. The learners were very active not only in helping each other to learn Chinese language and culture, but also in helping the teachers improve the course.

The first experience of the Introductory Chinese MOOC, for both learners and teachers, will definitely help to ameliorate the course in the future. More visual games will be introduced because a lot of students found them quite efficient in helping them recognize and memorize Chinese characters, though they were not assessed. It will also be a good idea to integrate some recording tools in the platform so that the learners can submit, compare and evaluate their oral productions.

A big challenge for language MOOCs lies in practising the language with native speakers. Telecollaboration might be a good solution as language learners

practise their target language with native speakers and both sides benefit. The eTandem Chinese-French course model ([Wang-Szilas, 2016](#)) has proved to have potential in helping language learners develop their communicative competences and intercultural competence. In the long run, it would be interesting to create an eTandem MOOC that can connect a Chinese MOOC for French-speaking learners and a French MOOC for Chinese-speaking learners so that they can practise the target languages with each other. This will definitely open a new research area for the design of language MOOCs.

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Beyond the language classroom: researching MOOCs and other innovations

Edited by Kan Qian and Stephen Bax

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